

Abstract

The invention relates to a code-tracking method and a rake receiver for CDMA communication systems of low
5 complexity yielding stable tracking. Received signal are distributed to a plurality of receiver fingers of a rake receiver. Each receiver finger i is assigned to a signal path of the transmitted signal which is subject to phase shift and power dissipation due to reflection,
10 diffraction and scattering. According to the invention in each receiver finger i an estimation of the timing delay $\hat{\tau}^{(i)}$ is provided and interference from other signal components j are subtracted from signal components of the current signal path i ($i \neq j$) yielding a reliable
15 estimated timing delay $\hat{\tau}$.